EXHIBIT 1

Defendant's *Markman* Hearing Presentation

WSOU Investments, LLC d/b/a Brazos Licensing & Development v. OnePlus Tech. (Shenzhen) Co., Ltd.,

Civil Action No. 6:20-cv-952, -953, -956, -957, -958

October 28, 2021

The ’876 Patent – Markman Slides

’876 Patent: “…a function of the presence or absence of a reception of a data transmission”

- Claim 1: “varying a rate for reporting channel quality information from a mobile station to a base station as a function of the presence or absence of a reception of a data transmission at the mobile station”

OnePlus’s Proposed Construction	WSOU’s Proposed Construction
varying a rate for reporting channel quality information from a mobile station to a base station using only the mobile station’s detection of the presence or absence of an actual data transmission from the base station as the trigger for varying the rate, and not varying the rate based on the content of the data transmission or any other message or signal instructing such action	Plain and ordinary meaning; or, if the Court deems a construction necessary: “varying a rate for reporting information about the status of the communication channel from a mobile station to a base station as a function of the presence or absence of a reception of a data transmission at the mobile station”

WSOU's Arguments in Sur-Reply Contradict the File History

The Examiner acknowledges that Chen fails to disclose or suggest the reporting features in claims 1 and 4-12. To make up for this deficiency the Examiner now relies upon Kobylinski. However, as the Examiner acknowledges in the Office Action it is only after a base station receives data, not a mobile, that the mobile is instructed to change its reporting rate. Further, as the Applicants have explained in detail before (see Applicants' appeal brief dated February 28, 2005), the claims are directed at a mobile changing its reporting rate after receiving data transmissions from a base station, not instructions.

2007-06-13 Response to Non-final Rejection

Arguments Distinguishing Prior Art Surrender Patent Scope

- Where an applicant argues that a claim possesses a feature that the prior art does not possess in order to overcome a prior art rejection, the argument may serve to narrow the scope of otherwise broad claim language. ..."[S]ince, **by distinguishing the claimed invention over the prior art, an applicant is indicating what the claims do not cover, he is by implication surrendering such protection.**"
  - *Seachange Int'l, Inc. v. C-COR, Inc.*, 413 F.3d 1361, 1372–73 (Fed. Cir. 2005) *citing Rheox, Inc.,* 276 F.3d at 1325; *Ekchian v. Home Depot, Inc.,* 104 F.3d 1299, 1304 (Fed.Cir.1997)

Applicant Distinguished A Base Station "Instructing" A Change In Transmission Rate To Secure Allowance

Consequently, all teachings in Chen describe increasing power control feedback from the mobile based on the base station sending a message or signal instructing such action in preparation for a subsequent high data rate transmission.

By contrast, Applicants' claimed invention sets forth a mobile station that changes its rate of transmitting channel quality information based on the mobile's detection of the absence or presence of a data transmission from the base station. That is, the mobile station receives a data transmission from the base station and, in response thereto, begins transmitting channel quality information back to the base station at a second rate. Using the actual data transmission from the base station as a trigger for the mobile station to change its rate of transmitting channel quality information back to the base station is quite different from using a separate signaling message from the base station to the mobile telling the mobile to transmit more power control information (i.e., so that the base station can then adjust power for the subsequent higher speed data transmission) as described by Chen.

Feb. 2, 2004 Response to Non-Final Rejection at 6-7

Applicant Repeatedly Distinguished A Base Station "Instructing" A Change In Transmission Rate To Secure Allowance

lines 49-59). In one embodiment, Chen describes a mobile (receiver) being instructed by the base station to send more power control information (e.g., at a higher rate) for a specified time period preceding the data transmission, so that appropriate adjustments to power can be made by the base station before sending the high rate data transmission to the mobile (see, e.g., col. 3, lines 48-54). In yet another embodiment, Chen describes the case where: 1) the link can be operating at the Idle rate; 2) that data is then received at the base station for *subsequent* transmission to the mobile; 3) that the base station instructs the mobile to send more power control information (e.g., on the reverse link); and 4) thereafter, the base station adjusts its power level and then sends the data transmission at a higher rate to the mobile (see, e.g., col. 11, line 40 to col. 13, line 10).

These teachings are quite different from Applicants' claimed invention. As recited in claim 1, a mobile sends channel quality feedback to a base station at different rates depending on whether there is an absence or presence of a data transmission from the base station to the mobile. That is, the trigger for changing the rate of channel quality feedback from the mobile to the base station is whether there is a data transmission received by the mobile from the base station. Using the actual data transmission from the base station as a trigger for the mobile station to change its rate of transmitting channel quality information back to the base station, as claimed by Applicants, is quite different from the teachings of Chen. In Chen, the rate of transmission of power control information over the reverse link (assuming for argument purposes that the power control information is "feedback") is varied as a function of the mobile receiving an instruction from the base station before (i.e., in preparation of) the base station sending the data transmission to the mobile. Accordingly, Chen does not teach varying feedback from the mobile based on the absence or presence of a data transmission from the base station to the mobile.

Aug. 6, 2004 Response to Non-Final Rejection at 5-6

The ’776 Patent – Markman Slides

’776 Patent: “transmitter configured to attempt access…” (claims 1 and 10)

Claim 10: “apparatus comprising: a transmitter configured to attempt access to a wireless network by sending … a first preamble comprising a signature sequence that is randomly selected from a set of signature sequences …”

Claim 1: “method comprising: attempting access to a wireless network by sending from a transmitter … a first preamble comprising a signature sequence that is randomly selected from a set of signature sequences …”

OnePlus’s Proposed Construction	WSOU’s Proposed Construction
This claim should be construed under 35 U.S.C. 112, ¶ 6. **Function**: attempting access to a wireless network by sending on a random access channel at a first transmit power a first preamble comprising a signature sequence and by randomly selecting the signature sequence from a set of signature sequences **Structure**: none disclosed. The claim is indefinite.	Plain and ordinary meaning. This claim should not be construed under 35 U.S.C. § 112, ¶ 6, nor is it indefinite.

’776 Patent: “transmitter configured to attempt access…” (claims 1 and 10)

- The specification only refers to “transmitter” in the SUMMARY section

SUMMARY

In accordance with one example embodiment of the invention is a method that includes attempting access to a wireless network by sending from a transmitter on a random access channel at a first transmit power a first preamble comprising a signature sequence that is randomly selected from a set of signature sequences; and responsive to determining that the access attempt from sending the first preamble was unsuccessful, re-attempting access to the wireless network by sending from the transmitter on the random access channel at a second transmit power a second preamble comprising a signature sequence, in which the second transmit power is no greater than the first transmit power.

’776 Patent, 2:44-55.

’776 Patent: “transmitter configured to attempt access…” (claims 1 and 10)

- Dr. Cooklev’s declaration adds nothing of value:

> 39. The term “transmitter” is a commonly used and well-understood term in the art that connotes structure to a person of ordinary skill in the art, who would understand a “transmitter” to refer to a combination of hardware and software that is capable of transmitting a signal.

'776 Patent: "transmitter configured to attempt access…" (claims 1 and 10)

- Dr. Cooklev acknowledges a transmitter is at best "connected to" a processor:

> 45. Figures 6B illustrates that multiple transmit/receive antennas can be part of the transmitter. Other hardware elements that are identified in Figure 6B are "power chip," "RF chip," "BB chip," etc. A person of ordinary skill in the art would have understood that these hardware elements can be part of the "transmitter." The transmitter is also connected to the rest of the device via the main processor, as conceptually illustrated in Figure 6B.

'776 Patent: "transmitter configured to attempt access…" (claims 1 and 10)

- WSOU asserts "to practice claims 1 and 10, the transmitter need only send (or be configured to send) a signature sequence **that has already been** 'randomly selected,' however accomplished." WSOU Sur-Reply (Group 1) at 4.
- This is wrong—the claims require an "access attempt" and, as confirmed by the specification, that involves selecting a sequence:

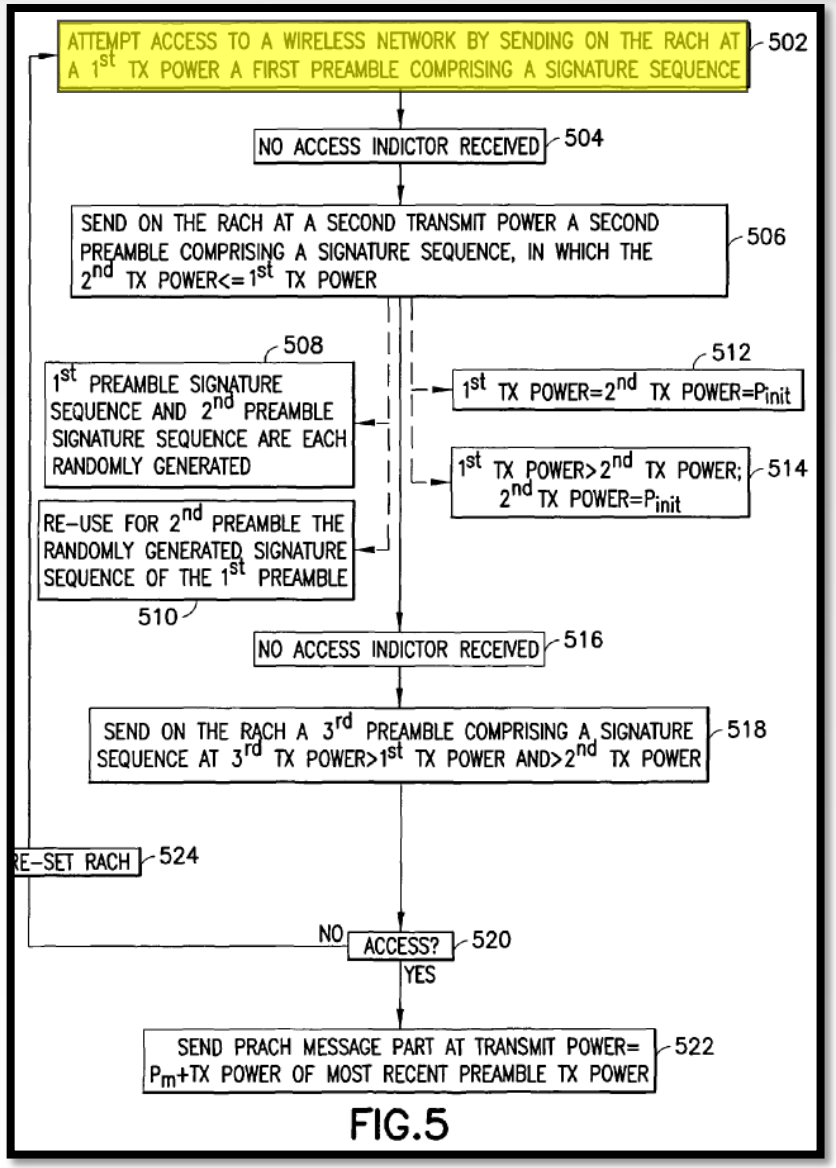
> At the first row of FIG. **3** and for the first RACH access attempt, according to the first and second embodiments the UE randomly selects a signature sequence and transmits a first preamble that has the randomly generated/selected signature sequence on the RACH. If in response the UE fails to obtain the acquisition indicator (e.g., it does not correctly

'776 Patent, 5:62-66.

	1st RACH ACCESS ATTEMPT		
	1st PREAMBLE	2nd PREAMBLE	3rd PREAMBLE
1st & 2nd EMBODIMENTS	RANDOMLY SELECT SEQUENCE	RANDOMLY SELECT SEQUENCE	RANDOMLY SELECT SEQUENCE
3rd & 4th EMBODIMENTS	RANDOMLY SELECT SEQUENCE	RE-USE SAME SEQUENCE FROM 1st PREAMBLE OF 1st RACH ACCESS ATTEMPT	RE-USE SAME SEQUENCE FROM 1st PREAMBLE OF 1st RACH ACCESS ATTEMPT
1st & 3rd EMBODIMENTS	INITIAL POWER (P_{init})	INITIAL POWER (P_{init})	INITIAL POWER+1 STEP INCREASE ($P_{init}+P_o$)
2nd & 4th EMBODIMENTS	INITIAL POWER+1 STEP INCREASE ($P_{init}+P_o$)	INITIAL POWER (P_{init})	INITIAL POWER+ GREATER THAN 1 STEP INCREASE ($P_{init}+P_o+x$)

'776 Patent, Fig. 3 (cropped and highlighted).

’776 Patent: “transmitter configured to attempt access…” (claims 1 and 10)



’776 Patent, Fig. 5.

’776 Patent: “processor” (claims 10, 11, 12, 14, 15, 16, 18, 19)

Claim 10: “a processor configured to determine that the access attempt from the first preamble was unsuccessful, and responsive to such determining to cause the transmitter to re-attempt access to the wireless network by causing the transmitter to send on the random access channel at a second transmit power a second preamble comprising a signature sequence, in which the second transmit power is no greater than the first transmit power”

OnePlus’s Proposed Construction	WSOU’s Proposed Construction
This claim should be construed under 35 U.S.C. 112, ¶6. **Function**: determining that access attempts are unsuccessful **Structure**: none disclosed. The claim is indefinite.	Plain and ordinary meaning.

’776 Patent: “processor” (claims 10, 11, 12, 14, 15, 16, 18, 19)

IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF TEXAS
WACO DIVISION

DYFAN, LLC,
Plaintiff

-v-

TARGET CORPORATION,
Defendant

§§§§§§§§§§§§

W-19-CV-00179-ADA

CLAIM CONSTRUCTION ORDER

Before the Court are the parties’ claim construction briefs: Plaintiff Dyfan, LLC’s opening,

[4] Were the Court to consider “mobile device” to be sufficient structure for “code,” then an applicant could simply recite two nonce words—“processor” and “code”—together in the claim in order to essentially write the claim in means-plus-function format without being subject to § 112, ¶ 6.

I. BACKGROUND

Dyfan filed this lawsuit on February 28, 2019, alleging that Target infringed U.S. Patent Nos. 9,973,899 (“the ’899 Patent) and 10,194,292 (“the ’292 Patent”). The ’292 Patent is a continuation of the ’899 Patent. Both patents are entitled “System for location based triggers for mobile devices.”

The patents-in-suit describe techniques for “providing a location based trigger for a mobile device.” ’899 Patent at 4:12-14. The “location” may be “a point (e.g. a particular geographical coordinates), an area (e.g. a set of geographical coordinates, a city, etc.), a volume, a road (or segment thereof), a place of business, a road intersection, [and/or] a landmark[.]” *Id.* at 4:23-27. The user’s mobile device may receive messages from broadcast short-range communication units

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Dyfan, LLC v. Target Corp., 6:19-cv-179-ADA, Dkt. 57 (W.D. Tex. 2020)

’776 Patent: “processor” (claims 10, 11, 12, 14, 15, 16, 18, 19)

IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF TEXAS
AUSTIN DIVISION

WSOU INVESTMENTS, LLC D/B/A BRAZOS LICENSING AND DEVELOPMENT,
Plaintiff,

v.

GOOGLE LLC,
Defendant.

§ CIVIL ACTION 6:20-cv-00571-ADA
§ CIVIL ACTION 6:20-cv-00572-ADA
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CLAIM CONSTRUCTION ORDER

The Court provided its preliminary constructions on March 23

claim construction hearing on March 25, 2021. ECF No. 45.

After careful consideration of the parties’ briefs, oral argumen

the Court enters its final constructions for each term as shown below.

Claim Term/ Phrase	Court’s Construction
“continuous wave doppler radar” United States Patent No. 9,335,825 Claims 1 and 19	Plain and ordinary meaning
“at least one memory and the computer program code are configured, with the at least one processor, to cause the apparatus to at least: detect that an application is being started on the	Subject to 35 U.S.C. § 112, ¶ 6. Function: detect that an application is being started on the apparatus; in response to the application being started on the apparatus,

“at least one memory and the computer program code are configured, with the at least one processor, to cause the apparatus to at least: detect that an application is being started on the apparatus; in response to the application being started on the apparatus, turn on a continuous wave doppler radar at the apparatus” United States Patent No. 9,335,825 Claim 1	Subject to 35 U.S.C. § 112, ¶ 6. Function: detect that an application is being started on the apparatus; in response to the application being started on the apparatus, turn on a continuous wave doppler radar at the apparatus Structure: none; indefinite

WSOU Investments, LLC v. Google LLC, 6:20-cv-00571-ADA, Dkt. 49 (W.D. Tex. June 2, 2021)

’776 Patent: “processor” (claims 10, 11, 12, 14, 15, 16, 18, 19)

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FOR THE WESTERN DISTRICT OF TEXAS
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GOOGLE LLC,
Defendant.

§ CIVIL ACTION 6:20-cv-00571-AI
§ CIVIL ACTION 6:20-cv-00572-AI
§ CIVIL ACTION 6:20-cv-00573-AI
§ CIVIL ACTION 6:20-cv-00574-AI
§ CIVIL ACTION 6:20-cv-00575-AI
§ CIVIL ACTION 6:20-cv-00576-AI
§ CIVIL ACTION 6:20-cv-00577-AI
§ CIVIL ACTION 6:20-cv-00578-AI
§ CIVIL ACTION 6:20-cv-00579-AI
§ CIVIL ACTION 6:20-cv-00580-AI
§ CIVIL ACTION 6:20-cv-00581-AI
§ CIVIL ACTION 6:20-cv-00582-AI
§ CIVIL ACTION 6:20-cv-00583-AI
§ CIVIL ACTION 6:20-cv-00584-AI
§ CIVIL ACTION 6:20-cv-00585-AI

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claim construction hearing on March 25, 2021. ECF No. 45.

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“at least one memory and the computer program code are configured, with the at least one processor, to cause the apparatus to at least: detect that an application is being started on the	Subject to 35 U.S.C. § 112, ¶ 6. Function: detect that an application is being started on the apparatus; in response to the application being started on the apparatus,

“client management processor configured to enable the user to select an electronic message from the inbox” United States Patent No. 8,751,585 Claim 9	Subject to 35 U.S.C. § 112, ¶ 6. Function: to enable the user to select an electronic message from the inbox Structure: indefinite
“a detection processor configured to detect the action defined in the archiving rule assigned to the selected electronic message was carried out” United States Patent No. 8,751,585 Claim 9	Subject to 35 U.S.C. § 112, ¶ 6. Function: to detect the action defined in the archiving rule assigned to the selected electronic message was carried out Structure: indefinite
“a collaborative application management processor configured to manage collaborative applications” United States Patent No. 8,751,585 Claim 9	Subject to 35 U.S.C. § 112, ¶ 6. Function: to manage collaborate applications Structure: indefinite

WSOU Investments, LLC v. Google LLC, 6:20-cv-00571-ADA, Dkt. 49 (W.D. Tex. June 2, 2021)

’776 Patent: “program of instructions” (claim 19)

Claim 19: “[a] non transitory computer readable memory storing a program of instructions that when executed by a processor result in actions comprising: ...”

OnePlus’s Proposed Construction	WSOU’s Proposed Construction
This claim should be construed under 35 U.S.C. 112, ¶6. **Function**: attempting access to a wireless network by sending a signature sequence on a random access channel **Structure**: none disclosed. The claim is indefinite.	Plain and ordinary meaning. This claim should not be construed under 35 U.S.C. § 112, ¶ 6, nor is it indefinite.

’776 Patent: “processor” (claims 10, 11, 12, 14, 15, 16, 18, 19)

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§ CIVIL ACTION 6:20-cv-00571-ADA
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CLAIM CONSTRUCTION ORDER

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claim construction hearing on March 25, 2021. ECF No. 45.

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Claim Term/ Phrase	Court’s Construction
“continuous wave doppler radar” United States Patent No. 9,335,825 Claims 1 and 19	Plain and ordinary meaning
“at least one memory and the computer program code are configured, with the at least one processor, to cause the apparatus to at least: detect that an application is being started on the	Subject to 35 U.S.C. § 112, ¶ 6. Function: detect that an application is being started on the apparatus; in response to the application being started on the apparatus,

“at least one memory and the computer program code are configured, with the at least one processor, to cause the apparatus to at least: detect that an application is being started on the apparatus; in response to the application being started on the apparatus, turn on a continuous wave doppler radar at the apparatus” United States Patent No. 9,335,825 Claim 1	Subject to 35 U.S.C. § 112, ¶ 6. Function: detect that an application is being started on the apparatus; in response to the application being started on the apparatus, turn on a continuous wave doppler radar at the apparatus Structure: none; indefinite

WSOU Investments, LLC v. Google LLC, 6:20-cv-00571-ADA, Dkt. 49 (W.D. Tex. June 2, 2021)

’776 Patent: “program of instructions” (claim 19)

IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF TEXAS
WACO DIVISION

DYFAN, LLC,
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-v-

TARGET CORPORATION,
Defendant

§§§§§§§§§§§§

W-19-CV

CLAIM CONSTRUCTION ORDE

Before the Court are the parties’ claim construction briefs: P
responsive, and reply briefs (ECF No. 32, 41, and 45, respect
Corporation’s opening, responsive, and reply briefs (ECF No. 31,
Court held the Markman hearing on December 19, 2020. ECF No
Court informed the Parties of the constructions it intended to enter
not alter any of those constructions.

I. BACKGROUND

Dyfan filed this lawsuit on February 28, 2019, alleging tha
Nos. 9,973,899 (“the ’899 Patent) and 10,194,292 (“the ’292 Pa
continuation of the ’899 Patent. Both patents are entitled “System
mobile devices.”

The patents-in-suit describe techniques for “providing a loca
device.” ’899 Patent at 4:12-14. The “location” may be “a point
coordinates), an area (e.g. a set of geographical coordinates, a city, etc.), a volume, a road (or
segment thereof), a place of business, a road intersection, [and/or] a landmark[.]” *Id.* at 4:23-27.
The user’s mobile device may receive messages from broadcast short-range communication units

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14	“said code, when executed, further configured to . . . after the first visual information is caused to be output based on the first location-relevant information; after the at least one mobile device is moved in the building; and in response to the receipt, from the at least one server and via the second wireless communications protocol, of the second response message including the second location-relevant information: cause to be output, via the at least one mobile device, the second visual information based on the second location-relevant information” (’292 Claim 15)	Subject to 35 U.S.C. § 112, ¶ 6 **Function**: “after the first visual information is caused to be output based on the first location-relevant information; after the at least one mobile device is moved in the building; and in response to the receipt, from the at least one server and via the second wireless communications protocol, of the second response message including the second location-relevant information: cause to be output, via the at least one mobile device, the second visual information based on the second location-relevant information” **Structure**: Indefinite

Dyfan, LLC v. Target Corp., 6:19-cv-179-ADA, Dkt. 57 (W.D. Tex. 2020)

’776 Patent: “program of instructions” (claim 19)

IN THE UNITED STATES DISTRICT COURT
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WACO DIVISION

DYFAN, LLC,
Plaintiff

-v-

TARGET CORPORATION,
Defendant

W-19-CV-00179-ADA

CLAIM CONSTRUCTION ORDER

Before the Court are the parties’ claim construction briefs: Plaintiff Dyfan, LLC responsive, and reply briefs (ECF No. 32, 41, and 45, respectively) and Defen Corporation’s opening, responsive, and reply briefs (ECF No. 31, 40, and 44, respect Court held the Markman hearing on December 19, 2020. ECF No. 65. During that Court informed the Parties of the constructions it intended to enter for all terms. This not alter any of those constructions.

I. BACKGROUND

Dyfan filed this lawsuit on February 28, 2019, alleging that Target infringed Nos. 9,973,899 (“the ’899 Patent) and 10,194,292 (“the ’292 Patent”). The ’292 continuation of the ’899 Patent. Both patents are entitled “System for location based mobile devices.”

The patents-in-suit describe techniques for “providing a location based trigger device.” ’899 Patent at 4:12-14. The “location” may be “a point (e.g. a particular g coordinates), an area (e.g. a set of geographical coordinates, a city, etc.), a volume segment thereof), a place of business, a road intersection, [and/or] a landmark[.]” *Id* The user’s mobile device may receive messages from broadcast short-range communication units

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Examining the claim term shows that it recites purely functional language. More specifically, the claim term recites that the code “cause to be output, via the at least one mobile device, the second visual information based on the second location-relevant information” after two conditions are met (“after the first visual information is caused to be output based on the first location-relevant information” and “after the at least one mobile device is moved in the building; and in response to the receipt, from the at least one server and via the second wireless communications protocol, of the second response message including the second location-relevant information”). In short, the claim term only requires that the code causes the second visual information to be output. As such, the code “is defined only by the function that it performs.” *Cypress Lake Software, Inc. v. Samsung Elec. Am. Inc.*, 382 F. Supp. 3d 586, 615 (E.D. Tex. May 10, 2019.

Dyfan, LLC v. Target Corp., 6:19-cv-179-ADA, Dkt. 57 (W.D. Tex. 2020)

The Court should disregard Plaintiff's expert.

- The Court should disregard expert testimony as to what the specification discloses because "[a] party cannot transform into a factual matter the internal coherence and context assessment of the patent simply by having an expert offer an opinion on it." *Teva Pharm. USA, Inc. v. Sandoz, Inc.*, 789 F.3d 1335, 1342 (Fed. Cir. 2015).
- Reliance on expert testimony also is prohibited when no algorithm is disclosed in the specification. *See EON Corp. IP Holdings v. AT&T Mobility LLC*, 785 F.3d 616, 624 (Fed. Cir. 2015) ("Where the specification discloses no algorithm, the skilled artisan's knowledge is irrelevant.") (citing *Noah Systems, Inc. v. Intuit Inc.*, 675 F.3d 1302, 1313 (Fed. Cir. 2012) (affirming district court's exclusion of expert testimony)).
- The "total absence of structure" renders the claims invalid for indefiniteness, and expert testimony is not permitted to supply the absent structure. *See Default Proof Credit Card Sys., Inc. v. Home Depot U.S.A., Inc.*, 412 F.3d 1291, 1302 (Fed. Cir. 2005) ("[T]he testimony of one of ordinary skill in the art cannot supplant the total absence of structure from the specification.").

The ’614 Patent – Markman Slides

'614 Patent: "means for causing sending of a buffer information report to a system station"

Claim 6: "means for causing sending of a buffer information report to a system station"

Claim 13: "at least one processor; and at least one memory including computer program code the at least one memory and the computer program code configured to, with the at least one processor, cause the apparatus … sending of a buffer information report to a system station"

6. An apparatus, comprising:

means for causing sending of a buffer information report to a system station from a node for relaying communications between at least one user station and the system station, the report being generated based on a report format used for uplink reporting by a user station; and

means for causing sending of an indication to the system station that the node for relaying has different buffering capabilities than the user station.

'614 Patent: "means for causing sending of a buffer information report to a system station"

> "**If special programming is required for a general-purpose computer to perform the corresponding claimed function, then the default rule requiring disclosure of an algorithm applies.**"
>
> *Ergo Licensing, LLC v. CareFusion 303, Inc.*, 673 F.3d 1361, 1365 (Fed. Cir. 2012)

- "Means for causing sending" the buffer information report (which must be generated based on a different device's report format) to a separate physical device (a system station, *i.e.*, a device separate from the sending apparatus) depends on a variety of actions that require special programming.
- The claimed function clearly "requires **more than merely plugging in a general-purpose computer**. Rather, some special programming would be required … ."
  - *Ergo Licensing, LLC v. CareFusion 303, Inc.*, 673 F.3d 1361, 1365 (Fed. Cir. 2012)

'614 Patent: "means for causing sending of a buffer information report to a system station"

"It is only in the rare circumstances where any general-purpose computer without any special programming can perform the function that an algorithm need not be disclosed."

EON Corp. IP Holdings LLC v. AT & T Mobility LLC, 785 F.3d 616, 621 (Fed. Cir. 2015) (quoting *Ergo*, 673 F.3d at 1365)

- This is not a "rare circumstance[]" where no special programming is required to accomplish the recited function. The claim requires more than simply "sending" generic data within a single device.

- An algorithm is required and WSOU has not shown that an algorithm is disclosed.

'614 Patent: "means for causing sending of a buffer information report to a system station"

Several of Katz's claims are clearly indefinite under the principles of *WMS Gaming*, *Aristocrat*, and *Harris*. Claims 21 and 33 of the '551 patent and claim 13 of the '065 patent contain a means-plus-function limitation that recites a "processing means ... for receiving customer number data entered by a caller and for storing the customer number data ... and based on a condition coupling an incoming call to the operator terminal, the processing means visually displaying the customer number data." The '551 and '065 patents, however, do not disclose an algorithm that corresponds to the "based on a condition coupling an incoming call to the operator terminal" function.

In re Katz Interactive Call Processing Pat. Litig., 639 F.3d 1303, 1315 (Fed. Cir. 2011)

6. An apparatus, comprising:
means for causing sending of a buffer information report to a system station from a node for relaying communications between at least one user station and the system station, the report being generated based on a report format used for uplink reporting by a user station; and

'614 Pat., claim 6

’614 Patent: “means for causing sending of a buffer information report to a system station”

The identified structure (Fig. 3 and its description) is simply a generic computer, not an algorithm

FIG. **3** shows an example of a controller apparatus **30** for a relay node comprising at least one memory **31**, at least one data processing unit **32** and an input/output interface **34**. The control apparatus further comprises a buffering entity **33**. The controller may be configured to execute an appropriate software code to provide the desired control functionality.

‘614 Pat. at 6:4-9

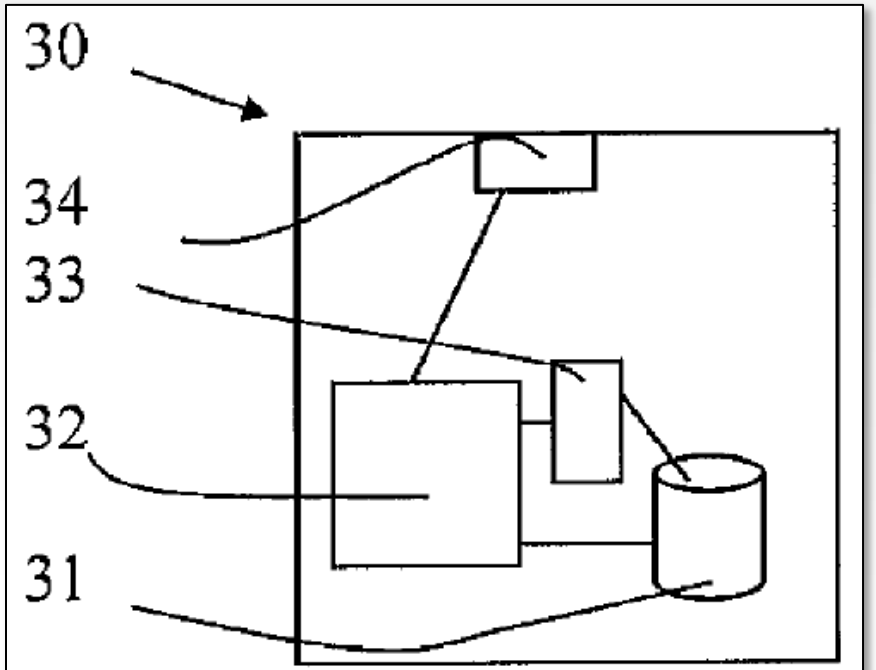

Fig. 3

'614 Patent: "means for causing sending of a buffer information report to a system station"

Claim 13 replaces "means for" with generic processor nonce words, invoking 112 ¶ 6

Undisputed claim 6 invokes 112 ¶ 6

"***means for* causing** sending of a buffer information report to a system station from a node for relaying communications between at least one user station and the system station, the report being generated based on a report format used for uplink reporting by a user station;"

(Claim 6)

"***at least one processor; and at least one memory including computer program code the at least one memory and the computer program code configured to, with the at least one processor*, cause** the apparatus … sending of a buffer information report to a system station from a node for relaying communications between at least one user station and the system station, the report being generated based on a report format used for uplink reporting by a user station;"

(Claim 13)

’614 Patent: “means for causing sending of a buffer information report to a system station”

IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF TEXAS
AUSTIN DIVISION

WSOU INVESTMENTS, LLC D/B/A BRAZOS LICENSING AND DEVELOPMENT,
Plaintiff,

v.

GOOGLE LLC,
Defendant.

§ CIVIL ACTION 6:20-cv-00571-ADA
§ CIVIL ACTION 6:20-cv-00572-ADA
§ CIVIL ACTION 6:20-cv-00573-ADA
§ CIVIL ACTION 6:20-cv-00574-ADA
§ CIVIL ACTION 6:20-cv-00575-ADA

CLAIM CONSTRUC

The Court provided its preliminary construc

claim construction hearing on March 25, 2021. ECF

After careful consideration of the parties’ b

the Court enters its final constructions for each term

Claim Term/ Phrase	Court’s Construction
“continuous wave doppler radar” United States Patent No. 9,335,825 Claims 1 and 19	Plain and ordinary meaning
“at least one memory and the computer program code are configured, with the at least one processor, to cause the apparatus to at least: detect that an application is being started on the	Subject to 35 U.S.C. § 112, ¶ 6. Function: detect that an application is being started on the apparatus; in response to the application being started on the apparatus,

“at least one memory and the computer program code are configured, with the at least one processor, to cause the apparatus to at least: detect that an application is being started on the apparatus; in response to the application being started on the apparatus, turn on a continuous wave doppler radar at the apparatus” United States Patent No. 9,335,825 Claim 1	Subject to 35 U.S.C. § 112, ¶ 6. Function: detect that an application is being started on the apparatus; in response to the application being started on the apparatus, turn on a continuous wave doppler radar at the apparatus Structure: none; indefinite

WSOU Investments, LLC v. Google LLC, 6:20-cv-00571-ADA, Dkt. 49 (W.D. Tex. June 2, 2021)

'614 Patent: "means for causing sending of an indication to the system station"

Claim 6: "means for causing sending of an indication to the system station"

Claim 13: "at least one processor; and at least one memory including computer program code the at least one memory and the computer program code configured to, with the at least one processor, cause the apparatus . . . sending of an indication to the system station"

6. An apparatus, comprising:

means for causing sending of a buffer information report to a system station from a node for relaying communications between at least one user station and the system station, the report being generated based on a report format used for uplink reporting by a user station; and

means for causing sending of an indication to the system station that the node for relaying has different buffering capabilities than the user station.

'614 Patent: "process an indication"

Claim 14: "the at least one memory and the computer program code are further configured to, with the at least one processor, cause the apparatus to perform at least the following: **process an indication** that the buffer size of the node for relaying is extended from that of the user equipment and information of the size of the extension"

OnePlus's Proposed Construction	WSOU's Proposed Construction
This claim should be construed under 35 U.S.C. 112, ¶6. **Function**: indefinite. **Structure**: indefinite. Alternatively: **Function**: processing an indication that the buffer size of the node for relaying is extended from that of the user equipment and information of the size of the extension. **Structure**: none disclosed.	Plain and ordinary meaning: This claim should not be construed under 35 U.S.C. § 112, ¶ 6, nor is it indefinite. If the Court deems a construction is necessary: "the at least one memory and the computer program code are further configured to, with the at least one processor, cause the apparatus to perform at the least the following: "process a signal signifying that the buffer size of the intermediate node is extended from that of the user equipment and information of the size of the extension"

’614 Patent: “process an indication”

The specification’s sole reference to “processing an indication” confirms that the phrase is indefinite

In accordance with another embodiment there is provided an apparatus comprising means for receiving a buffer information report from a node for relaying communications between at least one user station and a system station, the report being generated based on a report format used for uplink reporting by a user station, and control means for processing an indication that the node for relaying has different buffering capabilities than the user station, for determining the buffering capabilities of the node for relaying based on the received buffer information report and the indication, and for controlling communications between the system station and the node for relaying accordingly.

‘614 Pat. at 6:60-7:4

'614 Patent: "process an indication"

The recited function of "processing an indication … " is indefinite

- WSOU's attempt to characterize "process an indication" as "taken into account" and "performing operations on data" is hopelessly vague.
  - *How* is information is taken into account?
  - *What* operation is performed on the data?
  - *How* is the operation performed?

The ’746 Patent – Markman Slides

’746 Patent: “…importance…”

Claims 1, 11: “an importance of parts of channel information for the link adaptation”

OnePlus’s Proposed Construction	WSOU’s Proposed Construction
Indefinite	Plain and ordinary meaning; or, if the Court deems a construction is necessary: “a priority of parts of channel information for the link adaptation”

Claim 2: “a lower importance with respect to link adaptation than said at least one part”

OnePlus’s Proposed Construction	WSOU’s Proposed Construction
Indefinite	Plain and ordinary meaning; or, if the Court deems a construction is necessary: “a lower priority with respect to link adaptation than said at least one part”

Claims Are Invalid If Infringement Is User-Context Dependent

- ***Halliburton*** *Energy Servs., Inc. v. M-I LLC*, 514 F.3d 1244, 1254–55 (Fed. Cir. 2008) (A patent is invalid for indefiniteness where "**a given embodiment would simultaneously infringe or not infringe** the claims" depending on context and environmental conditions)

- ***Versata*** *Software, Inc. v. Zoho Corp.*, 213 F. Supp. 3d 829, 837–38 (W.D. Tex. 2016) ("**whether a certain user is infringing the asserted claims is context-dependent, and a context-dependent infringement determination is likely indefinite**" *citing Halliburton*)

"Importance" Changes Based On Environment

The importance of the wideband channel information compared to the importance of the sub-band channel information may be time-variant. For instance, when frequency-selective resource allocation is performed in a frequency-selective environment, the wideband channel information is less effective for link adaptation than the sub-band information. In such cases, a coding level having a higher detection probability may be dynamically assigned to sub-band information while wideband information receives a coding level of lower detection probability. When the user leaves the frequency-selective environment, its channel flattens. Then, the importance of sub-band channel information decreases. A dynamic embodiment of the invention may reflect this by reversing the above allocation of coding levels.

'746 Patent Col. 3 ll. 28-41

Claims Are Invalid If They Depend On Subjective User Assessment

- **Claims that Depend on User Assessment To Find Infringement Are Held Invalid:**
  - ***Uniloc** 2017 LLC v. Samsung Elecs. Am., Inc.*, (No. 2:18-CV-00506-JRG, 2020 WL 248880, at *16–18 (E.D. Tex. Jan. 16, 2020)) claims reciting "**important subject matter**" were **indefinite** because "the 'partition of important subject matter' [was] subjective, because it requires a broadcaster to act on the 'importance' of the partition. In particular, **what subject matter a broadcaster might deem to be 'important' will inevitably vary from person to person.**"
  - ***Crane Co.** v. Sandenvendo Am., Inc.*, No. 2:07-CV-42-CE, 2009 WL 1586704, at *13 (E.D. Tex. June 5, 2009) (claim reciting "**rapidly**" was not amenable to construction because **"[t]he term is entirely subjective and is judged purely from the consumer's standpoint.")**

Different Users Will Assign Different "Importance" to Different Types of Channel Quality Information

mation and/or to the payload may be static. A coding level having a higher detection probability may be assigned to the channel information while a coding level with lower detection probability is assigned to the payload data. In situations where reliable transmission of the payload is more important than reliable transmission of the channel information, the coding level assigned to the channel information may have a lower detection probability than the coding level assigned to the payload data. This assignment may be reversed in situations where reliable transmission of the payload is less important than reliable transmission of the channel information.

'746 Patent Col. 4 ll. 9-19

channel. When the channel is temporally unstable (e.g., at high user speed) the channel information is highly time variant and, thus, of lower importance than with temporally stable channels. One embodiment may reflect this as follows. For fast users (i.e., unstable channels), at least one coding level with high detection probability is assigned to data while at least one coding level with lower detection rate is assigned to channel information. This assignment is reversed when the channel stability improves (e.g., with slower users).

'746 Patent Col. 4 ll. 27-35

The ’746 Patent Does Not Teach Relative Importance

For the sake of simple illustration, the above embodiments use two coding-levels only. The hierarchical modulation is an exemplary type of multi-level coding. In other embodiments, more than two coding-levels are used and other types of multi-level coding, in particular multi-level forward-error-correction codes (FEC-codes), are applied. Furthermore, the above-described embodiments may be combined with each other. For instance, when using three levels, an index to a coarse precoding vector **51**, an index to a differential vector **55**, and the data sequence d may be transmitted simultaneously. The data sequence d may also be transmitted simultaneously with the wideband PMI, with the wideband CQI, with the sub-band PMI, and/or with the sub-band CQI. Furthermore, wideband information, sub-band information, an index to a coarse precoding vector **51**, and/or refinement information relative to the coarse precoding vector **51** may be transmitted simultaneously using different coding levels.

’746 Patent Col. 11 ll. 24-40

’746 Patent: “coding level”

Claims 1, 11: “a coding level of said multi-level coding”

Claims 2, 3: “coding level” (claims 1, 2, 3, 11)

OnePlus’s Proposed Construction	WSOU’s Proposed Construction
“a distinct detection probability level”	Plain and ordinary meaning; or, if the Court deems a construction is necessary: “a coding level of said multi-level coding” / “coding level”

The Patent Repeatedly Ties "coding level" to Detection Probability

Citation	Text
Abstract	"In order to … adapt the **detection probability to the importance of CI** … **the method comprises encoding[] the channel information (CI) using multi-level coding**"
2:18-20	"Assigning the at least a part of channel information to the predefined **coding level allows for controlling the detection probability**."
2:27-28	"a robust **coding level** (**i.e.**, high **detection rate**)"
2:50-53	"in other words, the parts of the channel information are prioritized by assigning them different **coding levels having different detection probabilities.**"

See also Opening Claim Construction Brief 12-15

These Repeated Explanations Figures and Embodiments Cannot Be Ignored

- *Howmedica Osteonics Corp. v. Zimmer, Inc.*, 822 F. 3d 1312, 1321 (Fed. Cir. 2016) (limiting claim terms where the embodiments "**are the only instances in which the patent specifies how to achieve the [patent's] goals … [and] every description and every figure in the patent that discusses the issue**" included defendant's proposed claim limitation)

These Repeated Explanations Figures and Embodiments Cannot Be Ignored

- *Abbott Lab'ys v. Sandoz, Inc.*, 566 F.3d 1282, 1288 (Fed. Cir. 2009) ("**the claims cannot 'enlarge what is patented beyond what the inventor has described as the invention.'**")